

AMENDMENTS TO THE CLAIMS

1. (**Currently Amended**) ~~A paper quality improver for internal addition, which comprises A method of making paper comprising:~~

mixing a pulp slurry and a polymer emulsion comprising a natural cationic polymer (A) and polymer particles (B) comprising at least vinyl monomer-derived structural units, said monomer units comprising 94.66 wt. % to 100 wt. % of at least one vinyl monomer-derived structural unit derived from a monomer selected from the group consisting of an alkyl acrylate, an alkyl methacrylate, vinyl fatty esters, styrene and a methyl styrene, wherein the polymer particles (B) are obtained by emulsion polymerization method, suspension polymerization method or dispersion polymerization method in the presence of a natural cationic polymer (A) to form a mixture;

filtering said mixture on a wire mesh to drain water out to form a paper layer.

2. (**Currently Amended**) ~~The paper quality improver for internal addition method~~ according to claim 1, wherein the natural cationic polymer (A) is at least one selected from cationic starch and cationic cellulose.

3. (**Currently Amended**) ~~The paper quality improver for internal addition method~~ according to claim 1, wherein the glass transition temperature (TG) of the polymer particle (B) comprising vinyl monomer-derived structural units is 90°C or less.

4. (**Currently Amended**) ~~The paper quality improver for internal addition method~~ according to claim 1, wherein the vinyl monomer is a vinyl fatty ester.

5. (**Currently Amended**) ~~The paper quality improver for internal addition method~~ according to claim 1, wherein the nitrogen content of the natural cationic polymer (A) is 0.05 to 1 wt %.

6. (**Currently Amended**) The ~~paper quality improver for internal addition method~~ according to claim 1, wherein the proportion of the natural cationic polymer (A) is 5 to 500 parts by weight relative to 100 parts by weight of the polymer particles (B).

7. (**Currently Amended**) A pulp sheet ~~comprising the paper quality improver for internal addition made by the method~~ according to claim 1 ~~on the surface and/or in the inside of the pulp sheet.~~

8. (**Currently Amended**) The pulp sheet according to claim 7, ~~which is obtained by adding the paper quality improver for internal addition wherein the polymer emulsion of claim 1 is present~~ in an amount of 0.05 to 20 parts by weight in terms of solid content to 100 parts by weight of ~~[[a]]~~ the pulp sheet.

9. (**Currently Amended**) ~~A paper quality improver for internal addition, which comprises a~~ The method according to claim 1, wherein the polymer emulsion comprising is a synthetic cationic polymer (A') having a viscosity of 20 mPa·s or more in a 7 wt. % aqueous solution as determined at 50°C with a Brookfield viscometer and Rotor No. 2 at 60 rpm, and a nitrogen content of 1.0 wt. % or less and polymer particles (B) having a glass transition temperature (TG) of 90°C or less having vinyl monomer-derived structural units, said monomer units comprising 94.66 wt. % to 100 wt. % of at least one vinyl monomer-derived structural unit derived from a monomer selected from the group consisting of an alkyl acrylate, an alkyl methacrylate, vinyl fatty esters, styrene and α -methyl styrene, wherein the polymer particles (B) are obtained by emulsion polymerization method, suspension polymerization method or dispersion polymerization method in the presence of a synthetic cationic polymer (A').

10. (**Currently Amended**) A method of improving paper qualities ~~of a pulp sheet, which comprises bringing the paper quality improver for internal addition according to claims 1 or 9 into contact with pulp stiffness of paper comprising:~~

bringing pulp into contact with a polymer emulsion comprising a natural cationic polymer (A) and polymer particles (B) comprising at least vinyl monomer-derived structural units, said monomer units comprising 94.66 wt. % to 100 wt. % of at least one vinyl monomer-derived structural unit derived from vinyl fatty esters, wherein the polymer particles (B) are obtained by emulsion polymerization method, suspension polymerization method or dispersion polymerization method in the presence of a natural cationic polymer (A).

11. ~~(Currently Amended)~~ A method ~~of improving paper qualities of a pulp sheet according to claim 10~~, which comprises adding ~~the paper quality improver for internal addition according to claims 1 or 9~~ said polymer emulsion to pulp slurry at the time of papermaking.

12. ~~(Cancelled)~~

13. ~~(Currently Amended)~~ The ~~paper quality improver~~ method according to claim 1, in which the vinyl monomer-derived structural unit comprises 2.43 wt. % or less of a polymerizable unsaturated group – containing anionic monomer.

14. ~~(Currently Amended)~~ The ~~paper quality improver~~ method according to claim 1, in which the vinyl monomer-derived structural unit comprises 2.78 wt. % or less of a nonionic hydrophilic group – containing monomer.

15. ~~(Currently Amended)~~ The ~~paper quality improver~~ method according to claim 1, in which the polymer emulsion includes polymer particles (B) having an average size of 0.1 to 30 μ m.

16. – 17. ~~(Cancelled)~~

18. ~~(Currently Amended)~~ The ~~paper quality improver of~~ method according to claim 1, wherein the emulsion contains particles (B) in an amount of 5 to 60 wt. %.

19. **(Currently Amended)** The ~~paper quality improver of~~ method according to claim 1, wherein the average diameter of the polymer particle (B) is 0.01 to 50 μ m.

20. **(Currently Amended)** The ~~paper quality improver of~~ method according to claim 9, wherein the synthetic cationic polymer (A') is present in an amount of 5 to 500 parts by weight based on 100 parts by weight of polymer particles (B).